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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,040	07/21/2003	Lawrence Leroy Kneisel	10541-1800	6379
29074	7590	10/20/2004	EXAMINER	
VISTEON C/O BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610			ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,040

Applicant(s)

KNEISEL ET AL.

Examiner

Ephrem Alemu

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 15 is/are allowed.
6) ☒ Claim(s) 1-5, 7-11, 13, 14, 16 and 17 is/are rejected.
7) ☒ Claim(s) 6 and 12 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/03 & 11/03.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3, 8, 12 and 13 are objected to because of the following informalities:

In claim 3, line 1, replace "claim 1" with --claim 2-- because claim 3 is further limiting claim 2, not "claim 1" as claimed.

In claim 8, line 4, "the delay" lack antecedent basis. In addition, "the delay of at least one antenna nodes to be adjusted" is not clear.

In claim 12, line 1, replace "claim 5" with --claim 6-- because claim 12 is further limiting claim 6, not "claim 5" as claimed.

In claim 13, line 1, replace "claim 10" with --claim 11-- because claim 13 is further limiting claim 11, not "claim 10" as claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-11, 13, 14, 16 and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Staehlin et al. (US 4,891,651) in view of Ehrenberg et al. (US 6,630,912).

Re claims 1, 3, 4, 5, 7, 9 and 14, Staehlin discloses an apparatus for receiving communication signals from satellites (i.e. phased array antenna system), comprising:

a plate of light channel material (i.e., light plane assembly 36 including translucent member 38), the plate having a top surface and a bottom surface (Figs. 3-5; abstract; Col. 2, lines 8-65; Col. 4, line 59- Col. 5, line 57); and

a plurality of antenna nodes (i.e., radiator assembly 62) supported on the top surface of the plate (36) (Figs. 3-5; Col. 5, lines 41-46);

wherein the plate of light channel material (i.e., light plane assembly 36 including translucent member 38) is operable to provide communication link between an electronic control unit (i.e., a phased array control system 110) and the plurality of antenna nodes (i.e., radiator assembly 62) (Figs. 3-5; abstract; Col. 4, line 60- Col. 8, line 35).

Staehlin does not disclose a support stand detachably attached to the bottom surface of the plate.

However, Ehrenberg discloses a detachable support stand (i.e., a folding pod mount assembly 20) for supporting an antenna system for the purpose of providing a portable antenna system having a lightweight easily assembled support (Fig. 2; abstract; Col. 1, line 5- Col. 2, line 54; Col. 19, lines 35-52).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Staehlin's antenna system with a detachable support stand as taught by Ehrenberg for the purpose of providing a lightweight and easy to assemble support for the antenna system.

Re claims 2 and 8, given Staehlin's modified by Ehrenberg's antenna system, providing the electronic control unit (i.e., a phased array control system 110) to the bottom side of the plate is obvious since the plurality of antenna nodes (i.e., radiator assembly 62) communicates through

Art Unit: 2821

the plate of light channel material (i.e., light plane assembly 36 including translucent member 38) with the electronic control unit (i.e., a phased array control system 110). Further more, for the control unit to combine and calculate as claimed considered to be obvious in order to provide the proper phase shift for a radar signal passed therethrough (see Staehlin (abstract; Col. 4, line 60- Col. 8, line 35)).

Re claims 10, 16 and 17, Although, Staehlin does not specifically disclose the material for the translucent member 38 being polycarbonate or glycolized polyester or acrylic material, it is considered to be well in the skill of an artisan at the time the invention was made to provide a translucent member made of polycarbonate or glycolized polyester or acrylic material since Staehlin teaches the translucent member 38 being made of a plexi-glass material, translucent glass or other suitable material (see Staehlin Col. 5, lines 5-15).

Re claims 11 and 13, Staehlin further shows at least one conductor (40, 42) supported by the plate (i.e., light plane assembly 36 including translucent member 38), the conductor providing a power transmission pathway (Fig. 4; Col. 5, lines 5-40).

Allowable Subject Matter

4. Claim 15 is allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art of record fail to teach or suggest alone or in combination, the limitations: "a plate of light channel material formed from a plurality of aligned subplates, each of the subplates having a top surface and a bottom surface; and a plurality of antenna nodes supported on the top surface of each of the subplates" as claimed in claim 15.

Art Unit: 2821

6. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fail to teach or suggest alone or in combination, the following limitations: “wherein the plate is formed from a plurality of subplates formed of light channel material” as claimed in claim 6.

Claim 12 is objected to as being dependent over objected claim 6.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiang et al. (US 6,396,456); Lembo (US 5,583,516); and Gonzalez (US 4,506,271); also teach similar inventive subject matter.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

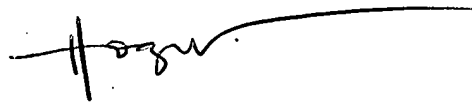
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2821

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA
10-18-04



**HOANG V. NGUYEN
PRIMARY EXAMINER**